D.KRUSL

RE-RUN

1600

RAW SEQUENCE LISTING   DATE: 03/04/2003
PATENT APPLICATION: US/09/804,733C   TIME: 14:52:01

Input Set : **N:\vernette\US09804733C.raw**
Output Set: **N:\CRF4\03042003\I804733C.raw**

```
 1 <110> APPLICANT: WANG, QI ET AL.
 2 <120> TITLE OF INVENTION: RECOMBINANT PROTEINS CONTAINING REPEATING UNITS
 3 <130> FILE REFERENCE: MONS:016US
```
C-->   **4 <140> CURRENT APPLICATION NUMBER: US/09/804,733C**
```
 5 <141> CURRENT FILING DATE: 2001-03-13
 6 <150> PRIOR APPLICATION NUMBER: PCT/US01/07957
 7 <151> PRIOR FILING DATE: 2001-03-13
 8 <160> NUMBER OF SEQ ID NOS: 29
 9 <170> SOFTWARE: PatentIn Ver. 2.1
11 <210> SEQ ID NO: 1
12 <211> LENGTH: 5
13 <212> TYPE: PRT
14 <213> ORGANISM: Euthynnus pelamis
15 <400> SEQUENCE: 1
16       Leu Lys Pro Asn Met
17        1               5
19 <210> SEQ ID NO: 2
20 <211> LENGTH: 4
21 <212> TYPE: PRT
22 <213> ORGANISM: Euthynnus pelamis
23 <400> SEQUENCE: 2
24       Lys Pro Asn Met
25        1
27 <210> SEQ ID NO: 3
28 <211> LENGTH: 4
29 <212> TYPE: PRT
30 <213> ORGANISM: Euthynnus pelamis
31 <400> SEQUENCE: 3
32       Val Val Tyr Pro
33        1
35 <210> SEQ ID NO: 4
36 <211> LENGTH: 15
37 <212> TYPE: DNA
38 <213> ORGANISM: Artificial Sequence
39 <220> FEATURE:
40 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
41       Primer
42 <220> FEATURE:
43 <221> NAME/KEY: modified_base
44 <222> LOCATION: (3)..(9)
45 <223> OTHER INFORMATION: N = A, C, G or T/U
46 <400> SEQUENCE: 4
```
W--> **47   ctnaarccna ayatg**   15

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/804,733C

Input Set : N:\vernette\US09804733C.raw
Output Set: N:\CRF4\03042003\I804733C.raw

```
 49 <210> SEQ ID NO: 5
 50 <211> LENGTH: 60
 51 <212> TYPE: DNA
 52 <213> ORGANISM: Artificial Sequence
 53 <220> FEATURE:
 54 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 55       Primer
 56 <220> FEATURE:
 57 <221> NAME/KEY: modified_base
 58 <222> LOCATION: (3)..(54)
 59 <223> OTHER INFORMATION: N = A, C, G, or T/U
 60 <400> SEQUENCE: 5
```
W--> 61   ctnaarccna ayatgctnaa rccnaayatg ctnaarccna ayatgctnaa rccnaayatg 60
```
 63 <210> SEQ ID NO: 6
 64 <211> LENGTH: 60
 65 <212> TYPE: DNA
 66 <213> ORGANISM: Artificial Sequence
 67 <220> FEATURE:
 68 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 69       Primer
 70 <220> FEATURE:
 71 <221> NAME/KEY: modified_base
 72 <222> LOCATION: (7)..(58)
 73 <223> OTHER INFORMATION: N = A, C, G or T/U
 74 <400> SEQUENCE: 6
```
W--> 75   catrttnggy ttnagcatrt tnggyttnag catrttnggy ttnagcatrt tnggyttnag 60
```
 77 <210> SEQ ID NO: 7
 78 <211> LENGTH: 25
 79 <212> TYPE: DNA
 80 <213> ORGANISM: Artificial Sequence
 81 <220> FEATURE:
 82 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 83       Primer
 84 <220> FEATURE:
 85 <221> NAME/KEY: modified_base
 86 <222> LOCATION: (12)..(18)
 87 <223> OTHER INFORMATION: N = A, C, G or T/U
 88 <400> SEQUENCE: 7                                                      25
```
W--> 89   aaagaattcc tnaarccnaa yatgc
```
 91 <210> SEQ ID NO: 8
 92 <211> LENGTH: 27
 93 <212> TYPE: DNA
 94 <213> ORGANISM: Artificial Sequence
 95 <220> FEATURE:
 96 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 97       Primer
 98 <220> FEATURE:
 99 <221> NAME/KEY: modified_base
100 <222> LOCATION: (18)..(24)
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/804,733C

DATE: 03/04/2003

TIME: 14:52:01

Input Set : **N:\vernette\US09804733C.raw**

Output Set: **N:\CRF4\03042003\I804733C.raw**

```
      101 <223> OTHER INFORMATION: N = A, C, G or T/U
      102 <400> SEQUENCE: 8                                                        27
W--> 103        aaagcggccg ccatrttngg yttnagc
      105 <210> SEQ ID NO: 9
      106 <211> LENGTH: 20
      107 <212> TYPE: DNA
      108 <213> ORGANISM: Artificial Sequence
      109 <220> FEATURE:
      110 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
      111        Primer
      112 <400> SEQUENCE: 9                                                        20
      113        taatacgact cactataggg
      115 <210> SEQ ID NO: 10
      116 <211> LENGTH: 19
      117 <212> TYPE: DNA
      118 <213> ORGANISM: Artificial Sequence
      119 <220> FEATURE:
      120 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
      121        Primer
      122 <400> SEQUENCE: 10                                                       19
      123        cgatcaataa cgagtcgcc
      125 <210> SEQ ID NO: 11
      126 <211> LENGTH: 48
      127 <212> TYPE: DNA
      128 <213> ORGANISM: Artificial Sequence
      129 <220> FEATURE:
      130 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
      131        Primer
      132 <220> FEATURE:
      133 <221> NAME/KEY: modified_base
      134 <222> LOCATION: (3)..(48)
      135 <223> OTHER INFORMATION: N = A, C, G or T/U
      136 <400> SEQUENCE: 11                                                       48
W--> 137        gtngtntayc cngtngtnta yccngtngtn tayccngtng tntayccn
      139 <210> SEQ ID NO: 12
      140 <211> LENGTH: 48
      141 <212> TYPE: DNA
      142 <213> ORGANISM: Artificial Sequence
      143 <220> FEATURE:
      144 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
      145        Primer
      146 <220> FEATURE:
      147 <221> NAME/KEY: modified_base
      148 <222> LOCATION: (1)..(46)
      149 <223> OTHER INFORMATION: N = A, C, G or T/U
      150 <400> SEQUENCE: 12                                                       48
W--> 151        nggrtanacn acnggrtana cnacnggrta nacnacnggr tanacnac
      153 <210> SEQ ID NO: 13
      154 <211> LENGTH: 33
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/804,733C

DATE: 03/04/2003
TIME: 14:52:01

Input Set : N:\vernette\US09804733C.raw
Output Set: N:\CRF4\03042003\I804733C.raw

```
        155 <212> TYPE: DNA
        156 <213> ORGANISM: Artificial Sequence
        157 <220> FEATURE:
        158 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
        159       Primer
        160 <220> FEATURE:
        161 <221> NAME/KEY: modified_base
        162 <222> LOCATION: (12)..(33)
        163 <223> OTHER INFORMATION: N = A, C, G or T/U
        164 <400> SEQUENCE: 13
W--> 165       aaaggatccg tngtntaycc ngtngtntay ccn                    33
        167 <210> SEQ ID NO: 14
        168 <211> LENGTH: 33
        169 <212> TYPE: DNA
        170 <213> ORGANISM: Artificial Sequence
        171 <220> FEATURE:
        172 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
        173       Primer
        174 <220> FEATURE:
        175 <221> NAME/KEY: modified_base
        176 <222> LOCATION: (10)..(31)
        177 <223> OTHER INFORMATION: N = A, C, G or T/U
        178 <400> SEQUENCE: 14
W--> 179       cccaagcttn ggrtanacna cnggrtanac nac                    33
        181 <210> SEQ ID NO: 15
        182 <211> LENGTH: 45
        183 <212> TYPE: DNA
        184 <213> ORGANISM: Artificial Sequence
        185 <220> FEATURE:
        186 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
        187       Primer
        188 <220> FEATURE:
        189 <221> NAME/KEY: modified_base
        190 <222> LOCATION: (3)..(45)
        191 <223> OTHER INFORMATION: N = A, C, G or T/U
        192 <400> SEQUENCE: 15
W--> 193       gtnccnccng tnccnccngt nccnccngtn ccnccgtnc cnccn         45
        195 <210> SEQ ID NO: 16
        196 <211> LENGTH: 45
        197 <212> TYPE: DNA
        198 <213> ORGANISM: Artificial Sequence
        199 <220> FEATURE:
        200 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
        201       Primer
        202 <220> FEATURE:
        203 <221> NAME/KEY: modified_base
        204 <222> LOCATION: (1)..(43)
        205 <223> OTHER INFORMATION: N = A, C, G or T/U
        206 <400> SEQUENCE: 16
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/804,733C

DATE: 03/04/2003
TIME: 14:52:01

Input Set : **N:\vernette\US09804733C.raw**
Output Set: **N:\CRF4\03042003\I804733C.raw**

```
                                                                        45
W--> 207       nggnggnacn ggnggnacng gnggnacngg nggnacnggn ggnac
     209 <210> SEQ ID NO: 17
     210 <211> LENGTH: 36
     211 <212> TYPE: DNA
     212 <213> ORGANISM: Artificial Sequence
     213 <220> FEATURE:
     214 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
     215       Primer
     216 <220> FEATURE:
     217 <221> NAME/KEY: modified_base
     218 <222> LOCATION: (12)..(36)
     219 <223> OTHER INFORMATION: N = A, C, G or T/U
     220 <400> SEQUENCE: 17
                                                                        36
W--> 221       aaaggatccg tnccnccngt nccnccngtn ccnccn
     223 <210> SEQ ID NO: 18
     224 <211> LENGTH: 36
     225 <212> TYPE: DNA
     226 <213> ORGANISM: Artificial Sequence
     227 <220> FEATURE:
     228 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
     229       Primer
     230 <220> FEATURE:
     231 <221> NAME/KEY: modified_base
     232 <222> LOCATION: (10)..(34)
     233 <223> OTHER INFORMATION: N = A, C, G or T/U
     234 <400> SEQUENCE: 18
                                                                        36
W--> 235       aataagcttn ggnggnacng gnggnacngg nggnac
     237 <210> SEQ ID NO: 19
     238 <211> LENGTH: 8
     239 <212> TYPE: PRT
     240 <213> ORGANISM: Artificial Sequence
     241 <220> FEATURE:
     242 <223> OTHER INFORMATION: Description of Artificial Sequence:m Synthetic
     243       Peptide
     244 <400> SEQUENCE: 19
     245       Val Pro Pro Leu Lys Pro Asn Met
     246         1               5
     248 <210> SEQ ID NO: 20
     249 <211> LENGTH: 48
     250 <212> TYPE: DNA
     251 <213> ORGANISM: Artificial Sequence
     252 <220> FEATURE:
     253 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
     254       Primer
     255 <220> FEATURE:
     256 <221> NAME/KEY: modified_base
     257 <222> LOCATION: (3)..(42)
     258 <223> OTHER INFORMATION: N = A, C, G or T/U
     259 <400> SEQUENCE: 20
```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/804,733C

DATE: 03/04/2003
TIME: 14:52:02

Input Set : N:\vernette\US09804733C.raw
Output Set: N:\CRF4\03042003\I804733C.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:4;  N Pos.  3,9
Seq#:5;  N Pos.  3,9,18,24,33,39,48,54
Seq#:6;  N Pos.  7,13,22,28,37,43,52,58
Seq#:7;  N Pos.  12,18
Seq#:8;  N Pos.  18,24
Seq#:11; N Pos.  3,6,12,15,18,24,27,30,36,39,42,48
Seq#:12; N Pos.  1,7,10,13,19,22,25,31,34,37,43,46
Seq#:13; N Pos.  12,15,21,24,27,33
Seq#:14; N Pos.  10,16,19,22,28,31
Seq#:15; N Pos.  3,6,9,12,15,18,21,24,27,30,33,36,39,42,45
Seq#:16; N Pos.  1,4,7,10,13,16,19,22,25,28,31,34,37,40,43
Seq#:17; N Pos.  12,15,18,21,24,27,30,33,36
Seq#:18; N Pos.  10,13,16,19,22,25,28,31,34
Seq#:20; N Pos.  3,6,9,12,18,27,30,33,36,42
Seq#:21; N Pos.  7,13,16,19,22,31,37,40,43,46
Seq#:22; N Pos.  13,16,19,22,28,37,40,43,46,52
Seq#:23; N Pos.  19,25,28,31,34,40,43,46,55,61,64,67,70,76,79,82
Seq#:25; N Pos.  3,6,9,15,18,21,24,30,39,42,45,51,54,57,60,66
Seq#:26; N Pos.  7,13,16,19,22,28,31,34,43,49,52,55,58,64,67,70
Seq#:27; N Pos.  13,16,19,25,28,31,34,40,49,52,55,61,64,67,70,76
Seq#:28; N Pos.  19,25,28,31,34,40,43,46,55,61,64,67,70,76,79,82
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/804,733C

DATE: 03/04/2003
TIME: 14:52:02

Input Set : **N:\vernette\US09804733C.raw**
Output Set: **N:\CRF4\03042003\I804733C.raw**

```
L:4 M:270 C: Current Application Number differs, Wrong Format
L:47 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:61 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:89 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:179 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:193 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
L:221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:260 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:288 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:302 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
M:341 Repeated in SeqNo=23
L:328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
M:341 Repeated in SeqNo=25
L:343 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
M:341 Repeated in SeqNo=26
L:358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
M:341 Repeated in SeqNo=27
L:373 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
M:341 Repeated in SeqNo=28
```